

A CYRES

ISO/SAE 21434:2021
WORKBOOK
Table Of Content

ISO/SAE 21434:2021 WORKBOOK

Table of Content

1. Introduction

- 1.1. Cybersecurity as new quality dimension Interview with Philipp Veronesi
- 1.2 Glossary: Terms and Definitions

2. Standards and Regulations

- 2.1 Introduction to ISO/SAE 21434:2021 (based on Figure 3)
- 2.2 ISO/SAE 21434:2021 Requirements – Officially licensed by ISO
- 2.3 ISO/SAE 21434 Gap analysis Interview with Manuel Sandler
- 2.4 UN Regulation No. 155
 - 2.4.1 Introduction to UN Regulation No. 155*
 - 2.4.2 Structure of UN Regulation No. 155*
 - 2.4.3 Relationship between UN Regulation No. 155 and ISO/SAE 21434:2021*
 - 2.4.4 Mapping UN Regulation No. 155 onto ISO/SAE 21434:2021*
- 2.5 Achieving UN R155 Compliance Interview with Frank Langner
- 2.6 Automotive SPICE for Cybersecurity
 - 2.6.1 Introduction to Automotive SPICE*
 - 2.6.2 Cybersecurity Processes*
 - 2.6.3 Other Processes that Support Cybersecurity*
 - 2.6.4 Mapping Automotive SPICE for Cybersecurity onto ISO/SAE 21434:2021*

3. Practical Experience Insights in Cybersecurity Management

- 3.1 ISO/SAE 21434 Personnel Certification Interview with Sendhilraja Rajaraman
- 3.2 Cybersecurity Plan [WP-06-01]
 - 3.2.1 Cybersecurity Plan at a glance*
 - 3.2.2 Template Overview*
 - 3.2.3 Cybersecurity Plan – Review Checklist*
 - 3.2.4 Introduction into the Cybersecurity Plan*
 - 3.2.5 Excursus: Creation of templates*
 - 3.2.6 Introduction: Additional templates for cybersecurity planning besides the Cybersecurity Plan*
 - 3.2.7 Template for the Cybersecurity Work Product Task Plan*
 - 3.2.8 Template for the Cybersecurity Plan*
 - 3.2.9 Cybersecurity Plan: Best Practice and What to Avoid*
- 3.3 Cybersecurity Interface Agreement [WP-07-01]

- 3.3.1 *Cybersecurity Interface Agreement at a glance*
- 3.3.2 *Template Overview*
- 3.3.3 *Cybersecurity Interface Agreement – Review Checklist*
- 3.3.4 *Introduction into the CIA*
- 3.3.5 *Template for the Cybersecurity Interface Agreement*
- 3.3.6 *Cybersecurity Interface Agreement: Best Practice and What to Avoid*
- 3.4 ISO/SAE 21434 Certification for suppliers Interview with Dr. Fabian Lanze
- 3.5 Cybersecurity Case [WP-06-02]
 - 3.5.1 *Cybersecurity Case at a glance*
 - 3.5.2 *Template overview*
 - 3.5.3 *Cybersecurity Case – Review Checklist*
 - 3.5.4 *Introduction into the Cybersecurity Case*
 - 3.5.5 *Template for the Cybersecurity Case*
 - 3.5.6 *Cybersecurity Case: Best Practice and What to Avoid*

4. Practical Experience Insights in Cybersecurity Engineering

- 4.1 Item Definition [WP-09-01]
 - 4.1.1 *Item Definition at a glance*
 - 4.1.2 *Template overview*
 - 4.1.3 *Item Definition – Review Checklist*
 - 4.1.4 *Introduction into the Item Definition*
 - 4.1.5 *Template for the Item Definition*
 - 4.1.6 *Item Definition: Best Practice and What to Avoid*
- 4.2 Threat Analysis and Risk Assessment (TARA) [WP-09-02]
 - 4.2.1 *TARA at a glance*
 - 4.2.2 *Template overview*
 - 4.2.3 *TARA – Review Checklist*
 - 4.2.4 *Introduction into the TARA*
 - 4.2.5 *Template for the TARA*
 - 4.2.6 *TARA: Best Practice and What to Avoid*
- 4.3 Cybersecurity Concept [WP-09-06]
 - 4.3.1 *Cybersecurity Concept at a glance*
 - 4.3.2 *Template overview*
 - 4.3.3 *Cybersecurity Concept – Review Checklist*
 - 4.3.4 *Introduction into Cybersecurity Concept*
 - 4.3.5 *Template for the Cybersecurity Concept*
 - 4.3.6 *Cybersecurity Concept: Best Practice and What to Avoid*
- 4.4 Cybersecurity Controls' catalogue
 - 4.4.1 *Introduction to Controls*

4.4.2 Cryptography Basics

4.4.3 Secure Software Update

4.4.4 Secure Boot

4.4.5 Secure Communication

4.4.6 Secure Debugging

4.4.7 Secure Diagnostics

4.4.8 Secure Memory

4.4.9 Event Logging and Intrusion Detection

4.4.10 Physical Tampering Protection

4.4.11 Project Level Controls

4.4.12 Production Line Security

4.5 Audits, assessments, and certifications Interview with Prof. Karol Niewiadomski

GET IN TOUCH!

CYRES Consulting Services GmbH

Highlight Towers

Mies-van-der-Rohe-Straße 8, 80807 Munich, Germany

Phone: +49 (0) 89 9542 808 00

E-Mail: office@cyres-consulting.com

Website: www.cyres-consulting.com